UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,151	04/24/2001	Yoshiko Akazawa	1573.1005	3422

21171	7590	01/26/2005

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EXAMINER
PESIN, BORIS M

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/840,151	AKAZAWA ET AL.
	Examiner	Art Unit	
	Boris Pesin	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 November 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6,8-10,12-14,16-19,21-23,25-27,29-31 and 33-39* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6,8-10,12-14,16-19,21-23,25-27,29-31 and 33-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____ .
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   5) ☐ Notice of Informal Patent Application (PTO-152)
    Paper No(s)/Mail Date _____ .   6) ☐ Other: _____ .

DETAILED ACTION

Response to Amendment

This communication is responsive to Amendment A, filed 09/07/2004.

Claims 1, 2, 4, 5, 6, 8, 9, 10, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 29,

30, 31, 33, 34, 35, 36, 37, 38, 39 are pending in this application. Claims 1, 9, 18, 26,

35, and 39 are independent claims. In the Amendment A, Claims 1, 2, 4, 5, 6, 8, 9, 10,

12, 13, 14, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 29, 30, 31, 33, 34, 35, 37, 38, 39 were

amended. This action is made Non-Final.

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

Claim Objections

Claim 9 is objected to because of the following informalities:

Line 10 includes the word "scent." The Examiner believes the Applicant meant

to write "scene."

Line 25 includes the word "scent." The Examiner believes the Applicant meant

to write "scene."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31, and 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenney (US 6381583) in view of Burge et al. (US 6014638).

In regards to claim 1, Kenney teaches an information processing apparatus comprising a memory device and a processor, said memory device having a first memory area for storing avatar information as controlled by a user and a second memory area for storing data representative of a plurality of respective three-dimensional virtual reality scenes each with virtual objects therein; said processor causing rendered images of a first three-dimensional virtual reality scene to be displayed on a display, data representative of said first virtual reality scene being stored in said second memory area(i.e. "*The storage means 10 can be implemented in any suitable manner, such as by one central memory or multiple distributed memories, or individual memories (e.g., diskettes or CD-ROMs provided to the shoppers for their individual use at home or business).*" Column 5, Line 49), said first virtual reality scene

including predefined virtual objects and an avatar controlled by said user (i.e. *"The data*

from the storage means 10 is used to provide a video representation of the shopping

facility as presented through a display means 12 as represented in FIG. 1." Column 5,

Line 57), said virtual objects being associated with respective specific items of content

(i.e. *"The system creates an electronically produced, electronically transmissible visual*

replica of a display of goods or other objects at a shopping facility or other particular

environment. The shopping facility is conveyed to a shopper through the present

invention as a specific shopping environment to be met when the shopper is actually at

the facility." Column 4, Line 66), said avatar being controlled by said user to act in said

first virtual reality scene and to gaze at objects therein to display the same in the images

of the first virtual reality scene, where the display of an object displays information about

its corresponding item of content (i.e. *"The control means 14 further allows the shopper*

to cause the display means 12 to stop at a desired part of the aisle, turn toward that

particular part, and zoom in on a particular product. The control means 14 can also

allow the shopper to cause the display means 12 to show movement of the selected

product off the shelf for closer examination or for moving the displayed representation of

the selected product into the represented shopping cart in the same manner as the

shopper would actually function in the real grocery store 2." Column 7, Line 7); said

processor storing, in said first memory area, positions and/or gaze orientation

information of said avatar as controlled in said first virtual reality scene input from said

user (i.e. *"The storage means 10 can be implemented in any suitable manner, such as*

by one central memory or multiple distributed memories, or individual memories (e.g.,

diskettes or CD-ROMs provided to the shoppers for their individual use at home or

business)." Column 5, Line 49); said processor analyzing the action of said avatar in

said first virtual reality scene to weight or identify items of content that are of interest to

said user according to the stored positions and/or the gaze orientation information of

said avatar relative to positions of said predefined virtual objects in said first virtual

reality scene, and said processor allowing rendered images of a second virtual reality

scene to be displayed on said display (i.e. *"When the shopper stops at a particular*

section to look at a product, as indicated by left, right, forward or reverse motion such as

input through the arrow keys of the keyboard, a more limited, closer view of a section of

the aisle can be viewed, such as shown in FIG. 8. Although not shown in the

representation of FIG. 8 due to space and lettering constraints, the individual products,

such as product 36, appear on the display means as replicas of the actual products and

include their labeling in sufficient definition that the labels can be read in at least close-

up views." Column 10, Line 5). Kenney does not teach, an information processing

apparatus wherein said processor, in accordance with said weighted or identified items

of content of interest to the user, providing a second three-dimensional virtual reality

scene that includes other virtual objects, said other virtual objects having, in accordance

with the weighted or identified items of content, respective specific optimal items of

content and having respective specific optimal positions for prominent display in said

second virtual reality scene. Burge teaches, *"During the display customization phase,*

displays with content regarding (1) general merchant information or options and/or (2)

specific merchant product and service information or options are customized to conform

to the shopper's preferences as indicated in the shopper's profile. A predictive model is

applied to the profile data to select display characteristics and elements--such as the

nature of items selected for the shopper, similarities to products recently purchased,

icon or button locations, colors for background, icons/buttons, and text, fonts, etc.--for

generating a display that is likely to reflect the shopper's preferences. The items that

appear on the display (as represented by icons or buttons) may relate to a general

topic, category, or area of interest (e.g., casual clothiers, camping equipment.) Items on

a display may also relate generally to a group of merchants (e.g., ABC Co. Clothing,

XYZ Camping Warehouse.) Finally, items may be merchant specific (e.g., ABC hiking

boots, ABC jackets.)" Column 5 Line 64 – Column 6 Line 14. It would have been

obvious to one of ordinary skill in the art at the time of the invention to combine the

teachings of Burge with Kenney and include a system to customize the display based

on the user preferences and place the items in prominent display with the motivation to

provide the user with a convenient method of shopping that is adaptable to the user's

habits.

In regards to claim 2, Kenney and Burge teach all the limitations of claim 1.

Kenney does not teach an information processing apparatus wherein a set of definition

data of said second virtual reality scene is selected from sets of definition data of said

respective virtual reality scenes. Burge teaches, *"Display attributes for individual items*

(i.e., item graphics) may also be variable. Some icons or buttons (i.e., items) may be

large or small and rectangular, square, or round. Some items may have associated

text. Finally, an icon or button may contain a different picture depending on a user's

preferences (e.g., store logo, product picture, product symbol.) In other words, several different pictures may be used to represent the same pair of hiking boots." Column 6, Line 15.

In regards to claim 4, Kenney and Burge teach all the limitations of claim 1. Kenney does not teach an information processing apparatus, wherein a further weighted feature of said user is derived from a message inputted by said user to determine said second virtual reality scene. Burge teaches, *"Profile data for the shopper (i.e., user data) 16 is stored in a User Profile Database 18. Profile data may also include personal data and details (e.g., age, sex) provided by the shopper when joining or subscribing to the service. This personal information may also be stored in the User Profile Database 18."* Column 7, Line 1.

In regards to claim 5, Kenney and Burge teach all the limitations of claim 1. Kenney does not teach an information processing apparatus wherein a further weighted feature of said user is derived from data related to said user to determine said second virtual reality scene. Burge teaches, *"the store visited, time of visit, merchandise viewed by shopper..."*Column 6, Line 56.

In regards to claim 6, Kenney and Burge teach all the limitations of claim 1. Kenney further teaches an information processing apparatus wherein said second virtual world includes said avatar (i.e. *"The data from the storage means 10 is used to provide a video representation of the shopping facility as presented through a display means 12 as represented in FIG. 1."* Column 5, Line 57).

In regards to claim 8, Kenney and Burge disclose all the limitations of claim 1, but do not specifically disclose the ability to access the definition data of the virtual world with the URL. However it is inherent in the invention that when something is accessed on the Internet, it is via a URL.

Claim 9 is in the same context as claim 1; therefore it is rejected under similar rationale.

Claim 10 is in the same context as claim 2; therefore it is rejected under similar rationale.

Claim 12 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 13 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 14 is in the same context as claim 6; therefore it is rejected under similar rationale.

Claim 16 is in the same context as claim 8; therefore it is rejected under similar rationale.

In regards to claim 17, Kenney and Burge disclose all the limitations of claim 9. Kenney does not teach an information processing apparatus wherein the data associated with the second virtual reality scene is definition data of said second virtual reality world. Burge disclose a Merchants Products and Services Database (Burge, Column 9, Line 61), or definition data, that may be used to create a virtual world based on the users interests.

Claims 18,19, 21, 22, 23 and 25 are in the same context as claims 1, 2, 4, 5, 6 and 8 respectively; they are therefore rejected under similar rationale.

Claims 26, 27, 29, 30, 31, 33, and 34 are in the same context as claims 9, 10, 12, 13, 14, and 16 respectively, they are therefore rejected under similar rationale.

Claim 35 is in the same context as claim 1; therefore it is rejected under similar rationale.

In regards to claim 36, Kenney and Burge teach all the limitations of claim 35. Kenney does not teach a method wherein said user inputted data is coordinate data and/or message data. Burge discloses that the user inputted data is message data (Column 5, Line 61).

In regards to claim 37, though Kenney does not specifically disclose that he obtains the data associated with the virtual world though an URL, it is inherent in the invention that when something is accessed on the Internet, it is via a URL.

In regards to claim 38, Kenney and Burge disclose all the limitations of claim 9. Kenney does not teach an information processing apparatus wherein the data associated with the second virtual reality scene is definition data of said second virtual reality world. Burge disclose a Merchants Products and Services Database (Burge, Column 9, Line 61), or definition data, that may be used to create a virtual world based on the users interests.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Kenney (US

6381583).

In regards to claim 39, Kenney teaches a method for a three-dimensional virtual

reality scene, comprising: determining whether or an extent to which a virtual object in

the three-dimensional virtual reality scene is of interest to the user by analyzing a

history of past actions of an avatar in the scene with respect to virtual objects in the

three-dimensional virtual reality scene, the virtual objects including the virtual object,

wherein the past actions comprise actions of the avatar as it was controlled, moved, or

oriented by the user within the three-dimensional virtual reality scene (i.e. *"These*

include pre-prepared lists of items routinely purchased, items purchased in the past,

and items due for reorder based on prior purchase history." Column 4, Line 25); and

after the determining and responsive to the user controlling the same or another avatar

within the same or another three-dimensional virtual scene, providing a three-

dimensional virtual reality scene to the user, where the virtual object determined to be of

interest to the user is specifically arranged or presented within the scene according to

the user's determined interest or extent thereof in the virtual object (i.e. *"For example,*

certain products that are on "special" at the grocery store 2 might flash on the display

screen of the display means 12. Alternatively, there might be a text indication noting

that such product is on special. Such distinctive display can be applied for other

purposes, examples of which include goods that may need to be reordered, items that

have been selected for current purchase, etc." Column 6, Line 41).

Response to Arguments

Applicant's arguments with respect to claims 1-2, 4-6, 8-10, 12-14, 16-19, 21-23,

25-27, 29-31, and 33-39 have been considered but are moot in view of the new

ground(s) of rejection.

Inquiry

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070.

The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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BP

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